



63 Wessel Road Rivonia 2128 PO Box 2597 Rivonia 2128 South Africa
Telephone: +27 (0)11 803 5726 Facsimile: +27 (0)11 803 5745
Web: www.gcs-sa.biz

Sebata Institute

Bateleur Building,
Ground Floor,
Hertford Office Park
90 Bekker Road,
Vorna Valley,
Midrand,
1685

22nd of October 2012

Attention: Ms Deborah O'Connor

Kusile Power Station Hydrogeological Specialist Statement

GCS received a request from the Sebata Institute on the 12th September 2012, to provide a specialist statement concerning the potential impacts of the ash disposal infrastructure and fencelines at the Kusile Power Station (KPS). A Basic Assessment process is being conducted on behalf of Eskom for NEMA listed activities 11 and 18 of GN R544 for the construction of the Ash Dump Dirty Dam (ADDD) and the ash dump embankment culvert within a wetland, a pipeline crossing a stream between the ADDD and the Station Dirty Dam (SDD) as well as a fenceline around the perimeter of the project area as well as around the ash dump facility.

Although the construction and operation of the KPS and associated infrastructure was authorised in accordance with the Environment Conservation Act, 1989 (ACT No. 73 of 1989), construction within wetlands was not specifically authorised. The specialist studies undertaken for the EIA did however address the wetlands in the assessments, covering impacts and mitigation of the infrastructure but since they were not specifically listed activities, they were not authorised in the Record of Decision (ROD).

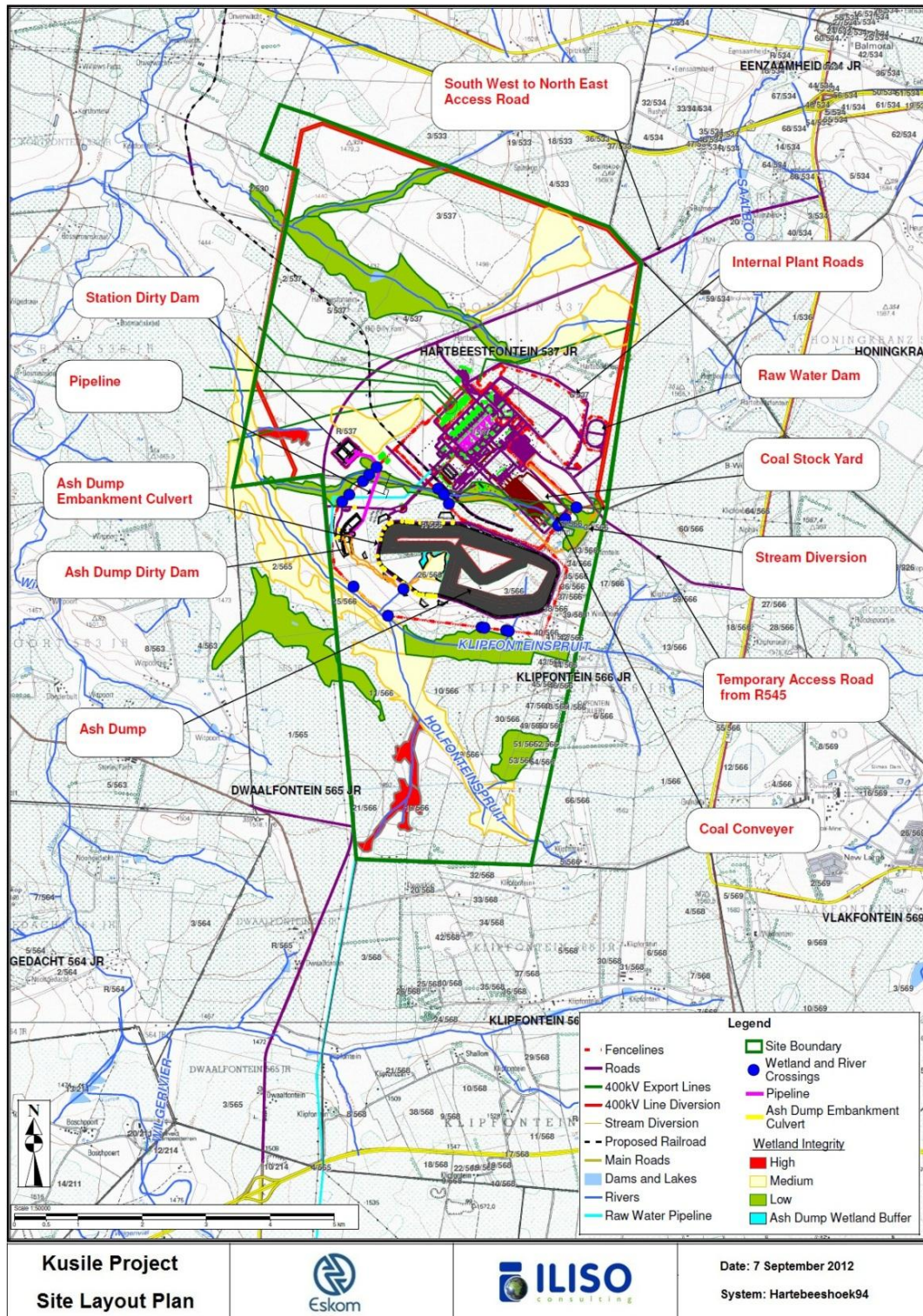
The initial hydrogeological assessment was undertaken for the Kusile Power Station Project Environmental Impact Assessment and was submitted to Ninham Shand (Pty) Ltd in 2005. This hydrogeological study was assessed in conjunction with the proposed ash dump plan and associated infrastructure layout as is required for the BAR.

Based on this assessment, it can be stated that there will be no foreseeable additional impacts on the hydrogeological resources, other than those assessed and discussed in the detailed Hydrological Specialist Study, conducted in 2006.

This letter also confirms that an amendment to the Kusile Power Station Ash Dump design; (reference: Figure 1 below) by reducing the size of the Ash Dump footprint, will not have any additional impacts on the groundwater other than the risks identified during the detailed Hydrogeological specialist study conducted in 2006.

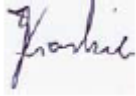
It must however be noted that the potential risks identified and proposed mitigation measures as detailed in the GCS report, Reference number NIN.05.469 dated 14th of November 2005 should still be implemented for the Ash Dump and Disposal Facilities.

Figure 1 The layout of the Kusile Power Station (with revised Ash Dump Layout, Ash Dump Dirty Dam, Pipeline and Fenceline around KPS and Ash Dump Facilities)



Please do not hesitate to contact me should you require any additional information.

Regards

A small, square image containing a handwritten signature in black ink. The signature appears to be 'Kobus Troskie' written in a cursive style.

Kobus Troskie

Senior Hydrogeologist

GCS Pty Ltd

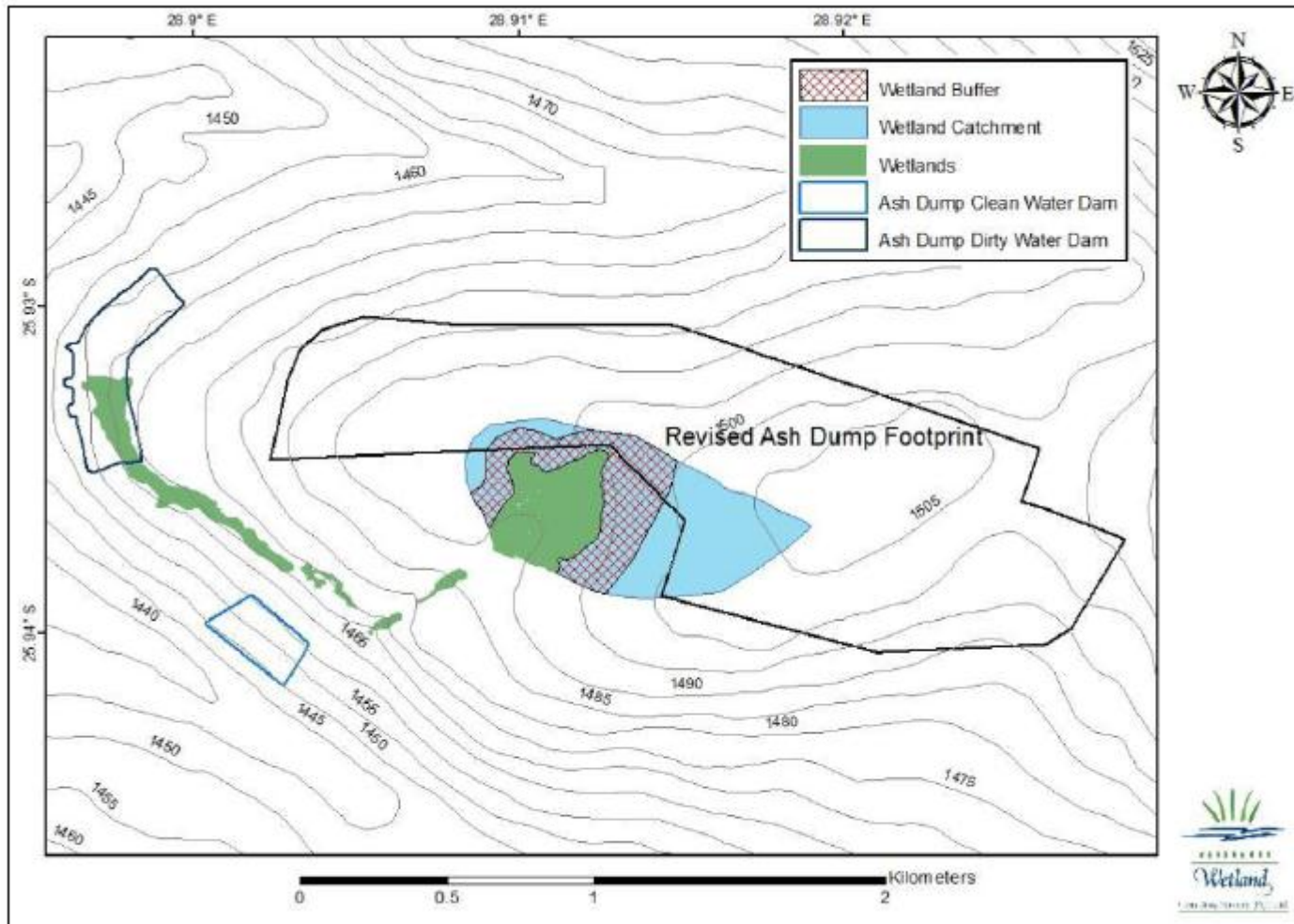


Figure 9: Wetlands, wetland buffer, wetland catchment and revised layout of the proposed ash dump facility.